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UTILITY PATENT APPLICATION TRANSMITTAL <small>(Only for new nonprovisional applications under 37 CFR 1.53(b))</small>		<i>Attorney Docket No.</i> 10354*3								
		<i>First Inventor</i> John R. Humphrey								
		<i>Title</i> ORGANIZATION OF CACHE MEMORY FOR HARDWARE ACCELERATION OF THE FINITE- DIFFERENCE TIME-DOMAIN METHOD								
		<i>Express Mail Label No.</i> ER 863440062 US								
APPLICATION ELEMENTS <small>See MPEP chapter 600 concerning utility patent application contents.</small>		MS Patent Application ADDRESS TO: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450								
<p>1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processing)</p> <p>2. <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.</p> <p>3. <input checked="" type="checkbox"/> Specification [Total Pages 17] (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure</p> <p>4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets 5]</p> <p>5. Oath or Declaration a. <input checked="" type="checkbox"/> Newly executed (original or copy) (unexecuted) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) i. <input type="checkbox"/> DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).</p> <p>6. <input checked="" type="checkbox"/> Application Data Sheet. See 37 CFR 1.76</p>		<p>7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)</p> <p>8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. <input type="checkbox"/> Computer Readable Form (CRF) b. Specification Sequence Listing on: i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or ii. <input type="checkbox"/> Paper c. <input type="checkbox"/> Statements verifying identity of above copies</p>								
ACCOMPANYING APPLICATION PARTS										
<p>9. <input type="checkbox"/> Assignment Papers (cover sheet & document(s))</p> <p>10. <input type="checkbox"/> 37 CFR 3.73(b) Statement [when there is an assignee] <input type="checkbox"/> Power of Attorney</p> <p>11. <input type="checkbox"/> English Translation Document (if applicable)</p> <p>12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 [Copies of IDS Citations]</p> <p>13. <input type="checkbox"/> Preliminary Amendment</p> <p>14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized)</p> <p>15. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed)</p> <p>16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.</p> <p>17. <input type="checkbox"/> Other: _____</p>										
<p>18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:</p> <p><input type="checkbox"/> Continuation <input type="checkbox"/> Divisional <input type="checkbox"/> Continuation-in-part (CIP) of prior application No.: _____</p> <p>Prior application information: Examiner _____ Art Unit: _____</p> <p>For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.</p>										
19. CORRESPONDENCE ADDRESS										
<p><input checked="" type="checkbox"/> Customer Number: 23416 OR <input type="checkbox"/> Correspondence address below</p> <p>Name _____</p> <p>Address _____</p> <p>City _____ State _____ Zip Code _____</p> <p>Country _____ Telephone _____ Fax _____</p>										
<table border="1" style="width: 100%;"> <tr> <td>Name (Print/Type)</td> <td>James M. Olsen</td> <td>Registration No. (Attorney/Agent)</td> <td>40,408</td> </tr> <tr> <td>Signature</td> <td colspan="2"><i>James M. Olsen</i></td> <td>Date March 24, 2004</td> </tr> </table>			Name (Print/Type)	James M. Olsen	Registration No. (Attorney/Agent)	40,408	Signature	<i>James M. Olsen</i>		Date March 24, 2004
Name (Print/Type)	James M. Olsen	Registration No. (Attorney/Agent)	40,408							
Signature	<i>James M. Olsen</i>		Date March 24, 2004							

16834 10/808895 U.S. PTO

032404

032404

14202 U.S. PTO

PTO/SB/17 (10-03)

Approved for use through 7/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003, Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 428.00)

Complete if Known

Application Number	Not Yet Assigned
Filing Date	March 24, 2004
First Named Inventor	John R. Humphrey
Examiner Name	Not Yet Assigned
Art Unit	N/A
Attorney Docket No.	10354*3

METHOD OF PAYMENT (check all that apply)

 Check Credit Card Money Order Other None
 Deposit Account:

Deposit Account Number 03-2775

Deposit Account Name Connolly Bove Lodge & Hutz LLP

The Director is authorized to: (check all that apply)

 Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) or any underpayment of fee(s)
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Small Entity

Fee Code (\$)	Fee	Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385		Utility filing fee	385.00
1002 340	2002 170		Design filing fee	
1003 530	2003 265		Plant filing fee	
1004 770	2004 385		Reissue filing fee	
1005 160	2005 80		Provisional filing fee	

SUBTOTAL (1) (\$ 385.00)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Extra Claims	Fee from below	Fee Paid
Total Claims 16	-20** =	0.00
Independent Claims 4	-3** =	43.00
Multiple Dependent		

Large Entity Small Entity

Fee Code (\$)	Fee	Fee Code (\$)	Fee Description
1202 18	2202 9		Claims in excess of 20
1201 86	2201 43		Independent claims in excess of 3
1203 290	2203 145		Multiple dependent claim, if not paid
1204 86	2204 43		** Reissue independent claims over original patent
1205 18	2205 9		** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 43.00)

**or number previously paid, if greater; For Reissues, see above

3. ADDITIONAL FEES

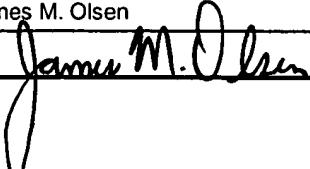
Large Entity	Small Entity	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet.	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	
Other fee (specify)			

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 0.00)

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	James M. Olsen	Registration No. (Attorney/Agent)	40,408	Telephone	(302) 658-9141
Signature				Date	March 24, 2004

Express Mail Label No. ER 863440062 US Dated: March 24, 2004

Application No. (if known):

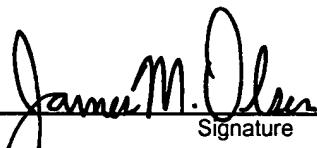
Attorney Docket No.: 10354*3

Certificate of Express Mailing Under 37 CFR 1.10

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on March 24, 2004
Date



Signature

James M. Olsen
Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Postcard
Check for \$428.00
Application Data Sheet
Utility Patent Application Transmittal
Fee Transmittal
Specification
Drawings
Combined Declaration and Power of Attorney (unexecuted)